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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/617,253

07/11/2003

Kyung-Chool Choi

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06/16/2006

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EXAMINER

CAVALLARI, DANIEL J

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/617,253	Applicant(s) CHOI ET AL.	
	Examiner Daniel J. Cavallari	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/19/04 & 6/3/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 7/19/2004 and 6/3/2005 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to show how the host (not shown) communicates to the control unit (140) in order to control the power as described in the specification (See Paragraph 29). The drawings further fail to disclose how the switching unit (160) receives the control signal from the power control unit (140) (See Paragraph 31) in which the power supply control unit (140) is omitted from the circuit diagram of Figure 3 yet essential to the operation of the device.

Paragraph 30 of the specification describes "The power supply control unit (140) drives the power switching unit (160)..." and Paragraph 31 discloses:

"To drive the power switching unit (160), the power switching unit (160) is driven by AC power and switched on or off to control provision of DC power to the electronic machine. To be more specific, the power switching unit (160) receives a control signal associated with the power supply of the electronic machine from the power supply control unit (140), is driven by the AC power received from the AC power connection unit (100) and outputs the result of a decision regarding provision or non-provision of DC power rectified by the power rectification unit (120) via output port (OUT2)."

Figure 2 fails to show the connection of the power rectification unit (120) with the power switching unit (160) while Figure 3 fails to show the control unit (140) making it

Art Unit: 2836

unclear how the power supply control unit (140) operates to control the power switching unit (160).

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, 7-10, 15, 16, & 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In regard to Claim 1

The specification fails to adequately describe how the power supply control unit (140) operates the power switching unit. Paragraph 32 recites "Referring to Fig 3, if the power switching unit (160) receives non-rectified AC power but does not receive the signal for driving the power switching unit (16)..." however the specification and Figure 3 fail to disclose "the signal" making it unclear what is controlling or how the power switching unit (160) is being driven.

Therefore, the limitation of "determining whether the host computer requests provision of the DC power to the electric machine and driving the power switching unit using AC power when in response to determining that provision of the DC power to the electronic machine is requested" is not adequately enabled.

Art Unit: 2836

In regard to Claim 2

The limitation of “a power switching unit, driven by the AC power, that is switched on or off to control provision of the DC power to the electronic machine when the host requests provision of DC power to the electronic machine” is not adequately enabled.

In regard to Claim 7

It is unclear how the power supply control unit (140) transmits a signal to the power switching unit (160) to stop operation of the power switching unit.

In regard to Claim 8 & 16

It is unclear what signal is being sent to the PWM-IC from the power supply control unit (140) and how it controls the power switching unit (160).

In regard to Claim 9 & 15

It is unclear what signal or how a signal is transmitted to stop operation of the power switching unit (160).

In regard to Claim 10 & 18

It is unclear how the power switching circuit is switched on or off to control provision of DC power to the electronic machine when a host requests provision of DC power to the electronic machine.

Art Unit: 2836

It is further unclear how the power supply control circuit controls the power switching unit.

Because of the 112 1st Paragraph rejections of claims 1, 2, 7-10, 15, 16, & 18, not art can be applied to claims 1-18.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Elferich et al. (US 6,751,108)
- Liu (US 5,999,421)
- Preller (US 2001/0009517)
- Loef (US 2002/0101746)
- Deboy et al. (US 2002/0159276)
- Wong et al. (US 7,049,794)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Cavallari whose telephone number is (571)272-8541. The examiner can normally be reached on Monday-Friday 8:30-5:00.

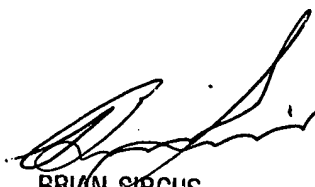
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2836

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Cavallari

June 1, 2006



BRIAN SIRCUS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800